

**Project Update: October 2019**

### **Cheetah identification based on track**

The cheetah is an emblematic carnivore of the African fauna. It is also considered as Vulnerable by IUCN. Because cheetahs mainly live at low density and outside protected areas, they are threatened by habitat fragmentation, conflicts with local populations and poaching. Thus, obtaining information about those animals is crucial to protect them efficiently. In N/a'ankusê Wildlife Sanctuary (Namibia), we sampled tracks of eight semi-captive cheetahs in order to reconstruct 3D models using close-range photogrammetry. Thanks to geometric morphometrics, we developed an algorithm capable of identifying the sex or the identity of the cheetahs previously sampled.



Figure 1 - Track sampling. The cheetah is lured in a prepared sand patch to collect high quality track. © Guillaume Baralle.